# FOURTH FIVE-YEAR REVIEW REPORT FOR STANLEY KESSLER SUPERFUND SITE MONTGOMERY COUNTY, PENNSYLVANIA



# Prepared by

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#### LIST OF ABBREVIATIONS & ACRONYMS

ACT2 Pennsylvania Land Recycling and Environmental Remediation Standards Act

ARAR Applicable or Relevant and Appropriate Requirement

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CFR Code of Federal Regulations
COCs Contaminants of Concern

DCA Dichloroethane DCE Dichloroethene

EPA United States Environmental Protection Agency

FYR Five-Year Review Gallons Per Minute

GETS Groundwater Extraction and Treatment System
GPRA Government Performance and Results Act

IC Institutional Controls

MCHD Montgomery County Health Department

MCL Maximum Contaminant Level

MCLG Maximum Contaminant Level Goals

MOA Mode of Action

MSC Medium Specific Concentration

NCP National Oil and Hazardous Substances Pollution Contingency Plan

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List O&M Operation and Maintenance

OU Operable Unit

PADEP Pennsylvania Department of Environmental Protection PADER Pennsylvania Department of Environmental Resources

PCE Tetrachloroethylene

PCOR Preliminary Close Out Report
PRP Potentially Responsible Party
RAO Remedial Action Objectives
RSL Regional Screening Level

RI/FS Remedial Investigation/Feasibility Study

ROD Record of Decision

RPM Remedial Project Manager
SHS State-Wide Health Standard
Site Stanley Kessler Superfund Site
SWRAU Site-Wide Ready for Anticipated Use

TCA Trichloroethane
TCE Trichloroethene

UAO Unilateral Administrative Order

μg/L microgram per liter

μg/m³ microgram per cubic meter
UMR Upper Merion Reservoir

UU/UE Unrestricted Use/Unrestricted Exposure

VOC Volatile Organic Compounds

#### I. INTRODUCTION

The purpose of a Five-Year Review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in five-year review reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP)(40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the fourth FYR for the Stanley Kessler Superfund Site (Site). The triggering action for this statutory review is the signing of the third FYR on August 6, 2014. The FYR has been prepared due to the fact that hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site consists of one operable unit (OU), which will be addressed in this FYR. OU1 addresses the groundwater remedy that has been selected for the Site.

The FYR was led by Remedial Project Managers (RPM) Gregory Voigt and Andrew Hass. Participants included EPA Toxicologist Linda Watson, EPA Hydrogeologist Mindi Snoparsky, EPA Biologist Kimberly Plank, EPA Community Involvement Coordinator Gina Soscia, and Pennsylvania Department of Environmental Protection (PADEP) Project Officer Timothy Cherry. The potentially responsible party (PRP) was notified of the initiation of the FYR, which began on August 1, 2018.

#### Site Background

The Site is located on a 3.21-acre parcel (Parcel Number 58-00-15418-00-4) in King of Prussia, Pennsylvania (Figures 1 and 2), and contains a one-story masonry building. Land use surrounding the Site consists of a mix of commercial and residential uses, and is not expected to change significantly in the future. Site geology consists of saprolite and underlying limestone bedrock. The Site is located above a carbonate aquifer, with groundwater flowing generally to the northeast. All residences in the immediate area are connected to public drinking water systems, and the nearest known downgradient use of groundwater or surface water as a drinking water supply is the Upper Merion Reservoir (UMR), about 3,500 feet north of the Site. The Schuylkill River is located about two miles east of the Site, and is the principal regional drainage feature. Part of an unnamed tributary of the Schuylkill River flows next to the Site.

Stanley Kessler and Company, Inc. (Kessler) historically conducted degreasing and welding wire repackaging at the Site. Starting around 1963, solvents were used for degreasing. Prior to 1963, acids and bases were used for cleaning metals. During the period when acids were used, splashed acid from the acid-dip degreasers was washed down a series of floor drains inside the building to an on-site acid waste neutralization system. This neutralization system consisted of two tanks, historically referred to as the septic tank (Tank 1) and cesspool (Tank 2).

In April 1979, trichloroethene (TCE), 1,2,3-trichloropropane, perchloroethene (PCE) and other volatile organic compounds (VOCs) were detected in the UMR. The UMR has served as a public water supply source operated by the Philadelphia Suburban Water Company since 1969. The detection of VOCs in the UMR prompted an area-wide investigation by PADEP, then known as the Pennsylvania Department of Environmental Resources (PADER), and EPA to identify potential sources of groundwater contamination in the area.

#### FIVE-YEAR REVIEW SUMMARY FORM

		SITE IDENTIFICATION
Site Name: St	anley Kessler	
EPA ID: P	AD014269971	
Region: 3	State: PA	City/County: King of Prussia/Montgomery
		SITE STATUS
NPL Status: Fina	Î e	
Multiple OUs?		Has the site achieved construction completion? Yes
		REVIEW STATUS
Lead agency: EP	A	
Author name (Fe	deral or State RPM):	Gregory Voigt and Andrew Hass
Author affiliation	ı: EPA	
Review period: 8/	/1/2018 - 7/24/2019	
Date of site inspe	ction: 5/9/2019	
Type of review: S	statutory	
Review number:	4	
Triggering action	date: 8/6/2014	45
Due date (five year	ırs after triggering act	ion date): 8/6/2019

#### II. RESPONSE ACTION SUMMARY

#### **Basis for Taking Action**

In July 1979, PADER and EPA sampled Tank 2. TCE and other organic contaminants were detected in these samples. On September 7, 1979, PADER notified Kessler that the company was in violation of the Pennsylvania Clean Streams Law and directed Kessler to install monitoring wells to define the extent of groundwater contamination, develop a recovery plan, eliminate all sources of groundwater pollution, and prepare a Pollution Incident Prevention Plan for the facility. Kessler installed and sampled five monitoring wells. Groundwater samples from these wells contained several organic contaminants.

In 1981, Tank 1 and Tank 2 were excavated. As the excavation progressed, EPA collected soil samples, which contained many VOCs. About 60 tons of soil were removed and transported off-site for disposal and the excavated area was backfilled.

EPA finalized the Site on the Superfund National Priorities List (NPL) in September 1983. In 1984, Kessler installed an on-site groundwater treatment system in response to a federal court order issued in March 1984. As part of the system, Kessler converted an existing monitoring well into a recovery well, RW-1. In June 1984, RW-1 began operation and extracted groundwater was treated in an air stripper and reintroduced to the subsurface through a an infiltration gallery to flush contaminants from the soil. The groundwater treatment and soil flushing program was discontinued in September 1990 in order to conduct additional investigation.

On January 7, 1991, a Consent Decree between EPA and Kessler was entered by the Court, whereby Kessler agreed to perform the remedial investigation and feasibility study (RI/FS) for the Site. During RI sampling, contaminant concentrations at RW-1 and monitoring wells downgradient of the Tank 1 and Tank 2 locations were significantly higher than drinking water standards and presented a threat to the aquifer, which is classified as a current source of drinking water (Class IIA). Based on the 1992 RI sampling, the primary contaminants of concern (COCs) at the Site are TCE, 1,1,1-trichloroethane (TCA) and 1,1-dichloroethene (DCE). The complete list COCs identifed at the Site is provided in Table 1.

The baseline risk assessment conducted as part of the 1992 RI/FS concluded that the consumption of groundwater at the Site would result in unacceptable risk to human health. In addition, the contaminated groundwater from the Site flows to the UMR and had the potential to contaminate this drinking water source.

#### Response Actions

EPA's selection of a remedy for the Site is described in the September 30, 1994 Record of Decision (ROD). The Remedial Action Objectives (RAOs) specified in the the ROD are as follows:

- Restore contaminated groundwater to background concentrations.
- · Prevent current or future exposure to contaminated groundwater.
- Protect uncontaminated groundwater for current and future use.

#### EPA's Selected Remedy included:

- Installation, operation and maintenance of groundwater extraction well(s) to remove contaminated groundwater from beneath the Site and to prevent contaminants from migrating further.
- Installation, operation and maintenance of granular activated carbon units at the groundwater extraction well(s) to treat groundwater to the required levels.
- Periodic sampling of groundwater and treated water to ensure that treatment components are effective and that groundwater remediation is progressing toward the required cleanup levels.
- Deed restrictions to prohibit the installation of new wells in areas of contamination that do not meet applicable or relavant and appropriate requirements (ARARs). These restrictions can be withdrawn when ARARs are achieved.

According to the Site's 1994 ROD, the groundwater ARARs are the federal maximum contaminant levels (MCLs), or the non-zero Maximum Contaminant Level Goals (MCLGs), or the levels identified in 25 Pennsylvania Code §264.90 – 264.100 (which required cleanup to background concentrations), whichever is more stringent. Subsequent to the issuance of the ROD, the Commonwealth of Pennsylvania repealed its groundwater cleanup level of natural background and established a new cleanup level set forth in the Pennsylvania Land Recycling and Environmental Remediation Standards Act, 35 P.S. §§ 6026.101 et seq. (July 18, 1995) (Act 2). Act 2 established State-Wide Health Standard (SHS) Medium Specific Concentration (MSCs) that are generally less than or equal to EPA MCLs. EPA will modify the ROD for the Site to reflect this change in groundwater ARARs and select the more stringent of PADEP Act 2 MSCs, EPA non-zero MCLGs, and EPA MCLs as the groundwater cleanup levels for Site COCs.

**Table 1: Current Groundwater COCs** 

<b>Groundwater COC</b>	
TCE	
1,1,1-TCA	
1,1-DCE	
cis-1,2-DCE	
1,1-DCA	
1,2-DCA	ä
PCE	
1,1,2-TCA	
Benzene	*
Chlorobenzene	
Dichloromethane	
Chloroform	
Toluene	

#### Status of Implementation

On September 22, 1995, EPA issued a Unilateral Administrative Order (UAO) for remedial design and remedial action to two PRPs, Stanley Kessler and the Kessler Company. The PRPs started the remedial design on October 31, 1995, and completed it on April 9, 1998. On-site remedial activities for installation of the groundwater extraction and treatment system (GETS) began on August 22, 1998. All remedial action activities followed the design specifications. On October 13, 1998, the GETS started operating. The Site achieved construction completion status when EPA issued the Preliminary Close Out Report (PCOR) on November 2, 1998. As detailed in previous FYR reports, EPA also approved a groundwater recovery optimization plan in November 2002 for the PRPs to install an additional extraction well (RW-8) to increase the pumping rate of the system from 10 gallons per minute to 40 gallons per minute.

#### **Institutional Controls**

The Site Institutional Controls (IC) includes a deed restriction that was filed on September 22, 2006 which placed the following use restriction on the Site property: "There shall be no installation of new groundwater wells (other than wells for groundwater remediation or monitoring) or any other use of groundwater at the Property, until such time as remediation standards set forth in the ROD are achieved or such other standards approved by EPA that would allow these uses."

Additionally, on February 1, 1997, the Montgomery County Health Department's (MCHD) Division of Water Quality Management adopted Individual Water Supply Regulations and amended these regulations on October 4, 2012. The purpose of these regulations is "to establish minimum standards for location, construction, modification or abandonment of individual water supply wells and system installation for protection of public health and welfare." According to these regulations, the County must issue a permit prior to well construction. During this time, MCHD coordinates with EPA to determine possible impacts a Superfund site would have on a proposed well. After well construction, the County must also issue approval to operate the well, after results of water quality testing have been submitted to the County. The adoption of these well regulations provides a reliable and enforceable governmental control that prevents exposure to site-related contaminants that exceed MCLs. These well regulations will also provide a method for EPA to track and confirm where and when any new wells have been installed in the area of the site-related plume. This well regulation is in effect for those areas potentially affected by the Site. See Figure 3.

**Table 2: Institutional Controls Summary Table** 

		Area o	f Interest – Stan (Parcel 58-00-1	ley Kessler Super 5418-00-4)	fund Site	¥
Media	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Instrument in Place	Notes
			Montgomery County-wide	Restrict installation and operation of groundwater wells in areas of contaminated groundwater.	1997 MCHD Division of Water Quality Management Individual Water Supply System Regulation	MCHD must approve the location, construction, testing, operation and abandonment of all individual water supply wells
Ground Water	Yes	Yes	58-00-15418- 00-4	Restrict installation of new groundwater wells on the Site and use of Site groundwater.	2006 Groundwater Deed Restriction.	The deed restriction states: "There shall be no installation of new groundwater wells (other than wells for groundwater remediation or monitoring) or any other use of groundwater at the Property, until suctime as remediation standards set forth in the ROD are achieved or such other standards approved by EPA that would allow

#### Systems Operations/Operation & Maintenance

Operation and Maintenance (O&M) of the GETS has been conducted since 1998, with performance metrics monitored and reported to EPA on a monthly basis. During the past five years, PRP contractor Advanced GeoServices has replaced the system's sediment bag filters on a monthly basis and performed the following nonroutine O&M tasks:

- October 2014, the electrical breaker on one of the extraction wells was replaced.
- · January 2015, distribution piping within Carbon Vessel #1 was cleaned to alleviate pressure build-up.
- March 2016 and September 2018, the carbon was replaced in both carbon vessels.
- June 2018, the pump in RW-1 was replaced.

Long-term groundwater monitoring is being performed by the PRPs consistent with the Site's O&M Plan and the Remedial Action Sampling and Analysis Plan. Groundwater monitoring consisted of quarterly sampling from 1998-2001, and has been performed semiannually thereafter. Monthly monitoring of the GETS effluent is also performed.

# III. PROGRESS SINCE THE LAST REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the current status of those recommendations.

Table 3: Protectiveness Determinations/Statements from the 2014 FYR

OU#	Protectiveness Determination	Protectiveness Statement
Sitewide	Short-term Protective	The remedy currently protects human health and the environment in the short term because groundwater contamination is decreasing, groundwater monitoring is ongoing and there are no exposures to groundwater contamination.
		However, in order for the remedy to be protective in the long term, the following actions need to be taken:
	33 (M	<ul> <li>Conduct a building survey to identify potential vapor intrusion entry points (i.e., cracks, open sumps, floor drains), including an assessment of whether these entry points require mitigation action. The installation of a mitigation system should be considered, and any change to the building use, occupancy, structural modifications or groundwater monitoring data should trigger indoor air sampling. EPA will assess the need for additional vapor intrusion sampling prior to the next FYR.</li> <li>Evaluate whether 1,4-dioxane should be included as COC</li> </ul>
æ		<ul> <li>at the Site.</li> <li>Perform a capture zone analysis and determine whether additional monitoring and/or extraction wells should be installed downgradient of MW-7, MW-5A and MW-6.</li> </ul>

Table 4: Status of Recommendations from the 2014 FYR

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
	Indoor air samples collected in 2011 and 2013 contained some VOCs at concentrations above screening levels, but are within EPA's acceptable risk range.	Conduct a building survey to identify potential vapor intrusion entry points (i.e., cracks, open sumps, floor drains), including an assessment of whether these entry points require mitigation action. The installation of a mitigation system should be considered, and any change to the building use,	Completed	A building survey was completed on November 4, 2014. The survey identified a small number of cracks and sumps that were subsequently sealed on May 3, 2015. Additionally, indoor air sampling was performed by the PRP on February 11-12, 2019, and the results did not exceed EPA's Regional Screening Levels for Industrial Indoor Air.	5/3/2015

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
		occupancy, structural modifications or groundwater monitoring data should trigger indoor air sampling. EPA will assess the need for additional vapor intrusion sampling prior to the next FYR.			
	1,4-dioxane has been detected in site GETS effluent, but concentrations are within EPA's acceptable risk range.	Additional 1,4- dioxane monitoring data will be collected, and EPA will use this information to evaluate whether 1,4- dioxane should be included as a COC for the Site. If EPA determines that 1,4- dioxane is a COC, a site-specific risk- based goal will be developed and will be incorporated into a decision document.	Completed	Sampling for 1,4-dioxane was conducted in March 30-31, 2016. Upon review, EPA concluded all risk from 1,4-dioxane is below or within EPA's acceptable risk criteria, and that 1,4-dioxane should not be included as a COC for the Site.	9/6/2016
	Groundwater elevation or chemical data have not been collected downgradient of MW-7, MW-5A and MW-6 to determine if the northern extent of the plume is controlled or if COCs have migrated beyond the boundaries of the current monitoring network.	Perform a capture zone analysis and determine whether additional monitoring and/or extraction wells should be installed downgradient of MW-7, MW-5A and MW-6.	Completed	A capture zone analysis was submitted to EPA on 5/29/2015. Upon review, EPA concluded that an additional monitoring well may be necessary downgradient of MW-7. However, due to the fact that monitoring wells from a nearby Superfund Site (Henderson Road) are already located +/- 500 feet downgradient of MW-7 and do not show elevated concentrations of Site COCs, EPA concluded no further action is necessary at this time.	5/29/15
1	Locks were missing on MW-4, RW-1 and MW-8.	Locks should be placed on MW-4, RW-1 and MW-8.	Completed	Locks were placed on MW-4, RW-1 and MW-8 on 10/27/14	10/27/14

#### IV. FIVE-YEAR REVIEW PROCESS

#### **Community Notification & Involvement**

A public notice was made available by a newspaper posting in the King of Prussia Courier on May 19, 2019 stating that there was a five-year review and inviting the public to submit any comments to EPA. A copy of the FYR newspaper ad is attached in Appendix B.

The results of the review and the report will be made available at the Site information repository located at:

Upper Merion Township Library 175 West Valley Forge Road King of Prussia, PA 19406,

#### And online at:

https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.docdata&id=0300862#Fact.

#### Site Interviews

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy that has been implemented to date. The interviews took place in person during the FYR site visit on May 9, 2019. The interviews are summarized below:

Janet Serfass (Upper Merion Township): Ms. Serfass is the Upper Merion Township Liaison for the Upper Merion Township Environmental Advisory Council (EAC). She is also the Township's Municipal Industrial Pre-Treatment Program (MIPP) Administrator. Ms. Serfass feels the Site has been well managed and that Site operations have had no effects on the surrounding community. Ms. Serfass is not aware of any community concerns regarding the Site. She is the Upper Merion Township contact for the majority of environmental issues and she does not receive calls about this Site. She does not feel it is necessary for EPA to reach out to the EAC because there have been no significant changes, issues or concerns at the Site. Ms. Serfass is not aware of any events, incidents or activities at the Site and feels well informed about the status of the Site.

**Kyle Schmeck (MCHD):** Mr. Schmeck is the Division Director of Water Quality Management at MCHD. He serves as the liaison to the County Commissioners and frequently receives calls from community members about Superfund sites in the area. Mr. Schmeck feels the Site has been well managed and does not have any concerns related to the Site. Mr. Schmeck has not received calls in relation to the Site. He requested a copy of the last FYR as well as this FYR so that he can remain informed in case the commissioners have questions. Mr. Schmeck feels well informed about the Site and hopes that EPA continues to keep him engaged on various sites in the Montgomery County area.

#### **Data Review**

The data review conducted for this FYR included analysis of groundwater potentiometric maps, monthly effluent sampling results, and semiannual groundwater monitoring well sampling results. The data review also presents the results of vapor intrusion sampling conducted at the Site

#### Groundwater

#### Potentiometric Maps

The data review began with an examination of the potentiometric surface maps created using groundwater elevation data that is collected monthly at the Site. A recent potentiometric surface map dated February 14, 2019 (Figure 4) represents the current pumping scenario of about 40 gallons per minute (gpm) (about 30 gpm at RW-8 and about 10 gpm at RW-1), and suggests capture of contaminated groundwater north of the Site building,

immediately downgradient of the source area. However, the influence of the recovery wells on downgradient monitoring wells MW-7, MW-5A and MW-6 is less clear.

Consistent with recommendations made in the 2014 FYR, the PRPs submitted a capture zone analysis to EPA in May, 2015. Upon review, EPA concluded that an additional monitoring well may be necessary downgradient of MW-7. However, due to the fact that two monitoring wells from another nearby Superfund Site are already located approximately 500 feet downgradient of MW-7 and do not show elevated concentrations of Site COCs (see Tables 1 and 2), EPA concluded an additional monitoring well is not necessary at this time. EPA will continue to evaluate groundwater COC concentrations downgradient from the extraction wells to determine if additional monitoring wells are necessary.

#### Effluent Monitoring

In the monthly progress reports prepared by the PRP contractor, monthly effluent sampling results are compared to "National Pollutant Discharge Elimination System (NPDES) instantaneous maximum discharge limits." There is no NPDES permit issued for the Site, but Site effluent is required to meet the substantive requirements of a permit. In the past five years, effluent concentrations exceeded the NPDES instantaneous discharge limits once, for TCE, in February 2016. In response, the PRP replaced the carbon filter in the GETS March 2016.

#### Groundwater Well Monitoring

Semiannual groundwater data from 2014 to 2018 were available for this FYR data review. Six Site monitoring wells (MW-2, MW-3, MW-4, MW-5A, MW-6, MW-7) and both Site recovery wells (RW-1 and RW-8) were included in sampling. For the purposes of evaluating the protectiveness of the remedy for this FYR, groundwater COC concentrations were compared to non-zero MCLGs, MCLs and PADEP Act 2 MSCs, if the MSC is more stringent than the non-zero MCLG or MCL or if no MCLG or MCL exists. TCE is the only COC that consistently exceeded the non-zero MCLG, MCL, or PADEP Act 2 MSC during the FYR period. 1,1-DCE and PCE have also had periodic exceedances of their respective MCLs during the FYR period (see Tables 3 through 10 in Appendix C).

Due to the presence of TCA contamination in groundwater, select groundwater samples were analyzed for 1,4-dioxane in 2010, 2011, 2015 and 2016. Samples were collected from MW-7, RW-1, RW-8, and the treatment effluent (see Table 11 in Appendix C). A federal MCL is not available for 1,4-dioxane, but PADEP has established a used aquifer, SHS MSC for 1,4-dioxane of 6.4 µg/L. Observed Site concentrations of 1,4-dioxane were above the PADEP Act 2 MSC in 8 of 12 samples that were collected, but are below or within EPA's acceptable risk criteria. Therefore, 1,4-dioxane will not be included as a COC for the Site.

#### Vapor Intrusion

Indoor air, sub-slab air, and outdoor air samples were collected by the PRPs during February 2011 and January 2013. Some of the sub-slab samples contained 1,1,2-TCA, chloroform, 1,1-DCE and TCE above EPA Regional Screening Levels (RSL) for Industrial Air (TCE and 1,1-DCE concentrations were as high as 4,800 ug/m³, and 6,700 ug/m³, respectively). Similarly, some of the indoor air samples contained 1,2-DCA and TCE at concentrations above EPA RSLs for Industrial Air. TCE indoor air samples in the warehouse portion of the building ranged from 2.4 ug/m³ – 3.3 ug/m³, demonstrating that vapor intrusion was occurring, however VOC concentrations were within EPA's acceptable risk range. Based on this information EPA requested that a building survey be conducted to identify potential vapor intrusion entry points (i.e., cracks, open sumps, floor drains), including an assessment of whether these entry points require mitigation action. A building survey was completed on November 4, 2014. The survey identified a small number of cracks and sumps that were subsequently sealed on May 3, 2015. Follow-up, indoor air sampling was performed by the PRPs on February 11-12, 2019, and the results did not exceed EPA RSLs for Industrial Indoor Air. EPA believes the decrease in indoor air VOC concentrations is likly due to the sealing work that was performed in 2015. Prior to the next FYR, another building evaluation should be performed and repairs made to any seals that may have deteriorated. Another round

of indoor air sampling should also be performed to confirm that the sealing remains an effective means of mitigation.

#### **Site Inspection**

The FYR site inspection was conducted on 5/9/2019. In attendance were Andrew Hass, Kimberly Plank, Nate Doyle and Gina Soscia (EPA), Bonnie McClellan and Tim Cherry (PADEP), Kyle Schmeck (MCHD) and Janet Serfass (Upper Merion Twp.). The purpose of the inspection was to assess the protectiveness of the remedy.

At the beginning of the inspection, a brief overview of the Site was provided to the group. In addition, the group walked the Site and observed monitoring wells, extraction wells, the discharge point for the treatment system and the treatment system enclosure. Nothing was observed during the site inspection that would imply that the remedy was not functioning as intended.

#### V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes. The remedy is functioning as intended by Site decision documents. The O&M procedures that are being imperented appear to be maintaining the effectiveness of the response actions and there are no apparent opportunities for optimization.

In the monthly progress reports prepared by the PRP contractor, effluent sampling results are compared to "NPDES instantaneous maximum discharge limits." There is no NPDES permit issued for the Site, but Site effluent is required to meet the substantive requirements of a permit. In the past five years, effluent TCE concentrations have exceeded the NPDES instantaneous discharge limits once, in February 2016. In response, the PRP replaced the carbon filter in the GETS in March 2016.

TCE, 1,1-DCE, and PCE are the only COCs with non-zero MCLG, MCL, or PADEP Act 2 MSC exceedances in groundwater during the past five years. Overall temporal trends indicate that TCE, 1,1-DCE, and PCE levels continue to decrease or remain stable in most wells. Continued monitoring will be performed to further evaluate these trends.

A deed restriction for the Site parcel and MCHD Regulations are in place to prohibit the installation of new wells in areas of contamination that do not meet non-zero MCLGs, MCLs, or PADEP Act 2 MSCs.

**QUESTION B:** Are the exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection still valid?

Yes, the exposure assumptions and RAOs used at the time of the remedy selection are still valid. However, some of the toxicity data, cleanup levels, and risk assessment methods used at the time of the remedy selection are no longer valid. There have been significant changes in EPA's risk assessment guidance since the 1994 ROD. These include changes in dermal guidance, inhalation methodologies, vapor intrusion, exposure factors, identification and assessment of mutagenic mode of action (MOA) contaminants and a change in the way early-life exposure is assessed for vinyl chloride. To address these changes, the Selected Remedy in the 1994 ROD will be modified to include a cumulative risk assessment once groundwater cleanup levels have been met.

The groundwater ARARs in the 1994 ROD are the federal MCLs, non-zero MCLGs, or natural background, whichever is more stringent. Subsequent to the issuance of the ROD, the Commonwealth of Pennsylvania repealed its groundwater cleanup level of natural background and established a new cleanup level under Act

2. Therefore, the Pennsylvania background regulations are no longer considered ARARs. EPA will modify the ROD for the Site to reflect this change in groundwater ARARs and select the more stringent of PADEP Act 2 MSCs, EPA non-zero MCLGs and MCLs as the groundwater cleanup levels for Site COCs. 1,4-dioxane has been detected at concentrations exceeding the PADEP Act 2 MSC. However, EPA concluded that risk from 1,4-dioxane is below or within EPA's acceptable risk criteria, and that 1,4-dioxane should not be included as a COC for the Site.

Vapor intrusion was identified as a new potential exposure pathway in 2011. Cracks and sumps were sealed in February 2019 to address the issue and confirmation sampling indicated that all detected VOCs were below EPA RSLs for Industrial Air. Prior to the next FYR, another building evaluation should performed and repairs made to any seals that may have deteriorated. Another round of indoor air sampling should also be performed to confirm that the sealing remains an effective means of mitigation.

In general, it appears that the remedy is progressing and is expected to achieve the RAOs established in the 1994 ROD.

**QUESTION C:** Has any other information come to light that could call into question the protectiveness of the remedy?

No other information has come to light that could call into question the protectiveness of the remedy.

#### VI. ISSUES/RECOMMENDATIONS

	Issues/Recommendations
OU(s) without Issues/	Recommendations Identified in the Five-Year Review:
None	V

OU(s): 1	Issue Category: Ot Note: Change in Al		2		
	Issue: The groundwater ARARs in the 1994 ROD are the federal MCLs, non-zero MCLGs, or natural background concentrations, whichever is more stringent. Subsequent to the issuance of the ROD, the Commonwealth of Pennsylvania repealed its groundwater cleanup level of natural background and established a new cleanup level under Act 2. Therefore, the Pennsylvania background regulations are no longer considered ARARs.				
	ARARs and select the	Modify the ROD for the he more stringent of PA oundwater cleanup level	DEP Act 2 MSCs, EPA	ange in groundwater A non-zero MCLGs,	
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date	
No	Yes	EPA	EPA	9/30/2019	

OU(s): 1	Issue Category: Remedy Performance						
	<b>Issue:</b> There have been significant changes in EPA's risk assessment guidance since the 1994 ROD. These include changes in dermal guidance, inhalation methodologies, vapor intrusion, exposure factors, identification and assessment of mutagenic MOA contaminants and a change in the way early-life exposure is assessed for vinyl chloride.						
	Recommendation: Modify the ROD for the Site to include a cumulative risk assessment once all groundwater cleanup levels have been met for all Site COCs.						
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date			
No	Yes	EPA	EPA	9/30/2019			

OU(s): 1	Issue Category: Monitoring  Issue: The results of the latest vapor intrusion sampling are within EPA's acceptable risk range, and suggest that the building sealing work that was performed in 2015 is effectively mitigating vapor intrusion. However, the long-term effectiveness of the sealing work needs to be confirmed.					
	Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date	
No	Yes	EPA	EPA	8/4/2023		

#### OTHER FINDINGS

- 1. Continue to evaluate groundwater COC concentrations downgradient from the extraction wells to determine if additional monitoring wells are necessary.
- 2. Continue to evaluate the influence of the recovery wells on downgradient monitoring wells MW-7, MW-5A and MW-6 to determine if optimization of the GETS is necessary.

#### VII. PROTECTIVENESS STATEMENT

#### Sitewide Protectiveness Statement

Protectiveness Determination:

Short-term Protective

Protectiveness Statement:

The remedy currently protects human health and the environment in the short term because groundwater contamination is decreasing, groundwater monitoring is ongoing, there are no exposures to groundwater contamination and institutional controls are in place to prevent exposures.

However, in order for the remedy to be protective in the long term, the following actions need to be taken:

- The ARARs in the 1994 ROD should be updated to select the more stringent of PADEP Act 2 MSCs, EPA non-zero MCLGs, and EPA MCLs as groundwater cleanup levels for Site COCs;
- The Selected Remedy in the 1994 ROD should be modified to include a cumulative risk assessment once all groundwater cleanup levels have been met for all Site COCs; and
- The need for additional vapor intrusion sampling and mitigation should be assessed prior to the next FYR.

# VIII. GOVERNMENT PERFORMANCE AND RESULTS ACT MEASURES

As part of this FYR, the Government Performance and Results Act (GPRA) Measures have also been reviewed. The GPRA Measures and their status are provided as follows:

## **Environmental Indicators**

Human Health:

Current Human Health Exposure Controlled and Protective Remedy in place

Groundwater Migration:

Groundwater Migration Under Control

## Site-Wide Ready for Anticipated Use (SWRAU)

The Site was considered to be SWRAU on September 9, 2011.

#### IX. NEXT REVIEW

The next FYR report for the Site is required five years from the completion date of this review.

# APPENDIX A - REFERENCE LIST

The following documents are available in the Administrative Record (https://semspub.epa.gov/src/collection/03/AR330):

- Stanley Kessler Superfund Site Record of Decision; September 1994
- Third Five-Year Review Report for Stanley Kessler Superfund Site, August 2014
- Monthly Progress Reports, September 2014 March 2019

## APPENDIX B - FIGURES

Figure 1: Site Location

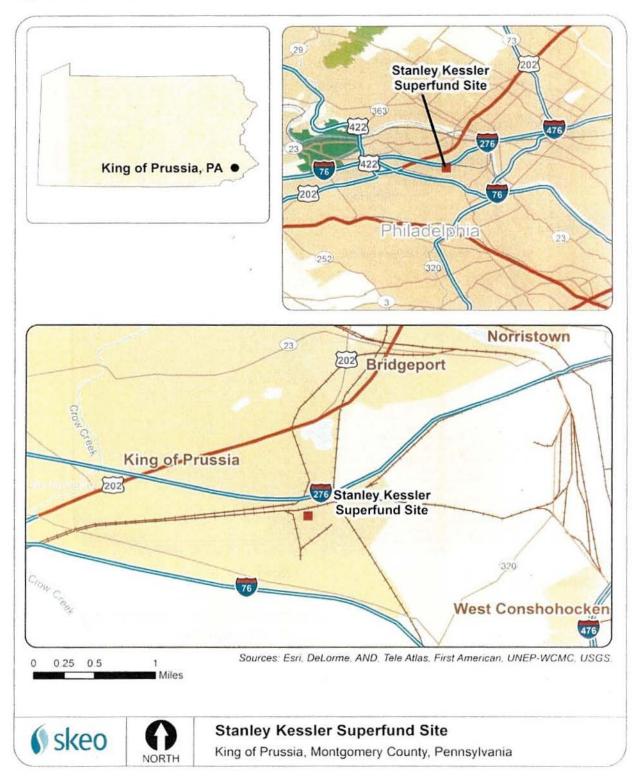


Figure 2: Detailed Site Map

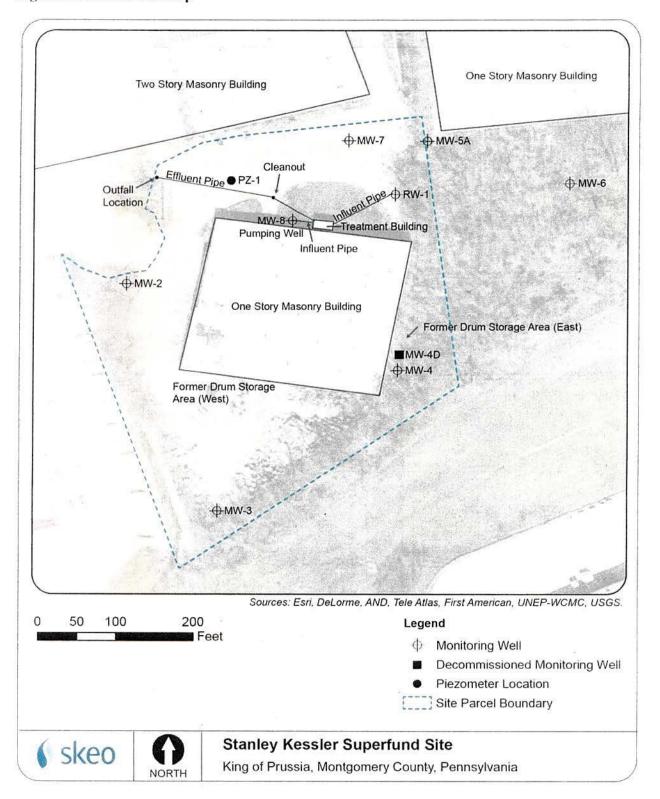
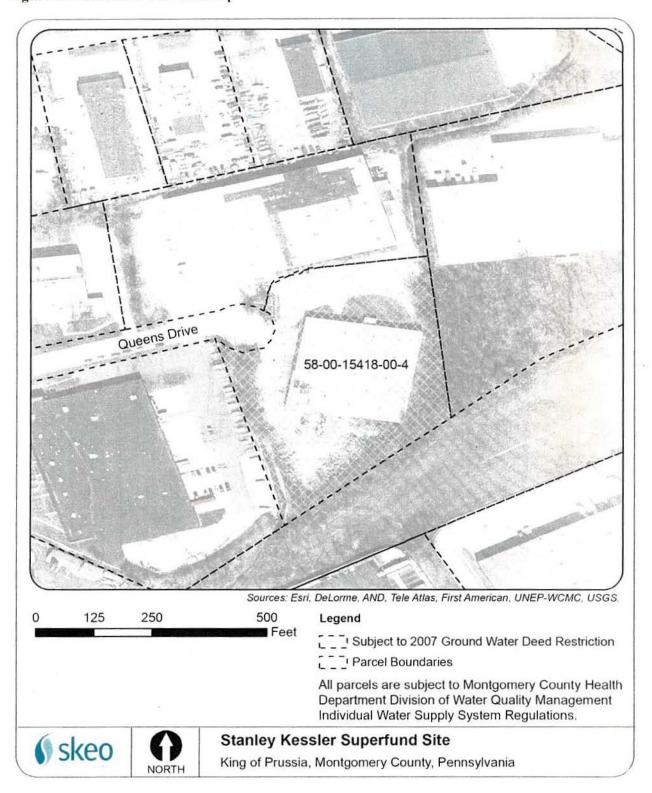


Figure 3: Institutinal Controls Map



20

# APPENDIX C - TABLES

Table 1: Goundwater Monitoring Data From Henderson Road Well HR-8-153 (μg/L)

	HR-8-153	Performance Standard	1/13/2014	1/16/2015	1/18/2016	1/29/2017	1/18/2018
	TCE	5	<0.5U	<0.21U	<1U	<1U	<1U
	1,1,1-TCA	200	<0.5U	< 0.15U	<1U	<1U	<1U
	1,1-DCE	7	<0.5U	<0.22U	<1U	<1U	<1U
	cis-1,2-DCE	70	<0.5U	<0.19U	<1U	<1U	<1U
	1,1-DCA	810	<0.5U	<0.11U	<1U	<1U	<iu< td=""></iu<>
	1,2-DCA	5	<0.5U	1.5	<1U	<1U	<1U
	PCE	5	<0.5U	< 0.17U	<1U	<1U	<1U
	1,1,2-TCA	5	<0.5U	<0.2U	<1U	<1U	<1U
	Benzene	5	<0.5U	<0.07U	<1U	<1U	<1U
8	Chlorobenzene	100	<0.5U	< 0.14U	<1U	<1U	<1U
	Dichloromethane	5	<0.5U	< 0.32U	<iu< td=""><td><iu< td=""><td>&lt;1U</td></iu<></td></iu<>	<iu< td=""><td>&lt;1U</td></iu<>	<1U
	Chloroform	70	<0.5U	< 0.19U	<1U	<1U	<1U
	Toluene	1000	<0.5U	<0.12U	<1U	<1U	<1U

Table 2: Goundwater Monitoring Data From Stanley Kessler Well RW-1 (µg/L)

RW-1	Performance Standard	9/16/2014	3/26/2015	9/28/2015	3/30/2016	9/28/2016	3/27/2017	9/18/2017	3/14/2018	9/25/2018
TCE	5	67	25	34	23	24	24	22	22	31
1,1,1-TCA	200	40	15	18	13	13	13	12	13	20
1,1-DCE	7	5U	2.2	3.4	2.3	2.4	2.4	2.3	2.3	2.8
cis-1,2-DCE	70	5U	2U	2U	2U	2U	1.1	1U	1U	2U
1,1-DCA	810	5U	2U	2U	2U	2U	1U	1U	1U	2U
1,2-DCA	5	5U	2U	2U	2U	2U	1U	10	1U	2U
PCE	5	5U	2U	2U	2U	2U	1U	10	1U	2U
1,1,2-TCA	5	5U	2U	2U	2U	2U	1U	1U	1U	2U
Benzene	5	5U	2U	2U	2U	2U	1U	1U	1U	2U
Chlorobenzene	100	5U	2.3	2.2	2U	2U	1.9	1.4	1	2U
Dichloromethane	5	10U	4U	4U	4U	4U	2U	2U	2U	4U
Chloroform	70	5U	2U	2U	2U	2U	<b>1</b> U	1U	<b>1</b> U	2U
Toluene	1000	5U	2U	2U	2U	2U	1U	1U	<b>1</b> U	2U

Table 3: Goundwater Monitoring Data From Stanley Kessler Well MW-2 (µg/L)

Performance Standard	9/16/2014	3/26/2015	9/28/2015	3/30/2016	9/28/2016	3/27/2017	9/18/2017	3/14/2018	9/25/2018
5	1U	10	5.6	1U	25	4.8	23	2.2	4.5
200	1U	1U	3.6	1U	19	4.7	18	1.8	3.5
7	1U	1U	1.4	1U	2.9	2.1	14	1U	3
70	1U	1U	1U	1U	1U	1U	10	1U	1U
810	1U	1U	10	1U	10	<b>1</b> U	<b>1</b> U	1U	1U
5	1U	1U	10	1U	1U	1U	10	10	1U
5	1U	1U	1U	1U	1U	1U	1.4	1U	1U
5	1U	1U	10	1U	<b>1</b> U	1U	1U	1U	1U
5	1U	10	10	1U	1U	1U	10	1U	1U
100	1U	1U	10	1U	1.2	1U	1U	10	1U
5	2U	2U	2U	2U	2U	2U	2U	2U	2U
70	1U	10	<b>1U</b>	10	1U	1U	1U	1U	1U
1000	1U	1U	1U	<b>1</b> U	1U	1U	1U	1U	1U
	5 200 7 70 810 5 5 5 100 5 70	5 1U 200 1U 7 1U 70 1U 810 1U 5 1U 70 1U	5 1U 1U 200 1U 1U 7 1U 1U 70 1U 1U 810 1U 1U 5 1U 1U 5 1U 1U 5 1U 1U 10 10 10 10 10 10 10 5 2U 2U 70 1U 1U 1U	5       1U       1U       5.6         200       1U       1U       3.6         7       1U       1U       1.4         70       1U       1U       1U       1U         810       1U       1U       1U       1U         5       1U       1U       1U       1U         5       1U       1U       1U       1U         5       1U       1U       1U       1U         100       1U       1U       1U       1U         5       2U       2U       2U       2U         70       1U       1U       1U       1U	5       1U       1U       5.6       1U         200       1U       1U       3.6       1U         7       1U       1U       1.4       1U         70       1U       1U       1U       1U       1U         810       1U       1U       1U       1U       1U         5       1U       1U       1U       1U       1U         100       1U       1U       1U       1U       1U         5       2U       2U       2U       2U       2U         70       1U       1U       1U       1U       1U	5       1U       1U       5.6       1U       25         200       1U       1U       3.6       1U       19         7       1U       1U       1.4       1U       2.9         70       1U       1U       1U       1U       1U       1U         810       1U       1U       1U       1U       1U       1U         5       1U       1U       1U       1U       1U       1U         5       1U       1U       1U       1U       1U       1U         5       1U       1U       1U       1U       1U       1U         100       1U       1U       1U       1U       1U       1.2         5       2U       2U       2U       2U       2U       2U       2U         70       1U       1U       1U       1U       1U       1U       1U	5       1U       1U       5.6       1U       25       4.8         200       1U       1U       3.6       1U       19       4.7         7       1U       1U       1.4       1U       2.9       2.1         70       1U       1U       1U       1U       1U       1U       1U         810       1U       1U       1U       1U       1U       1U       1U       1U         5       1U       1U       1U       1U       1U       1U       1U       1U         5       1U       1U       1U       1U       1U       1U       1U       1U         5       1U       1U       1U       1U       1U       1U       1U       1U         5       1U       1U       1U       1U       1U       1U       1U       1U         100       1U       1U       1U       1U       1U       1U       1U       1U         5       2U       2U       2U       2U       2U       2U       2U       2U         70       1U       1U       1U       1U       1U       1U       1U       1U<	5       1U       1U       5.6       1U       25       4.8       23         200       1U       1U       3.6       1U       19       4.7       18         7       1U       1U       1.4       1U       2.9       2.1       14         70       1U       1U	5       1U       1U       5.6       1U       25       4.8       23       2.2         200       1U       1U       3.6       1U       19       4.7       18       1.8         7       1U       1U       1.4       1U       2.9       2.1       14       1U         70       1U       1U

Table 4: Goundwater Monitoring Data From Stanley Kessler Well MW-3 (µg/L)

MW-3	Performance Standard	9/16/2014	3/26/2015	9/28/2015	3/30/2016	9/28/2016	3/27/2017	9/18/2017	3/14/2018	9/25/2018
TCE	5	1U	1U	IU	1.1	1U	1.4	1.9	2.2	1.5
1,1,1-TCA	200	1U	IU	IU	1U	1U	IU	1U	IU	1U
1,1-DCE	7	IU	IU	IU	1U	IU	1U	1U	1U	1U
cis-1,2-DCE	70	1U	IU	IU	IU	1U	1U	IU	IU	1U
1,1-DCA	810	1U	IU	1U	IU	1U	IU	IU	W	1U
1,2-DCA	5	IU	1U	IU	1U	IU	1U	IU	1U	1U
PCE	5	IU	1U	1U	IU	IU	1U	IU	1U	1U
1,1,2-TCA	5	IU	1U	IU	IU	IU	IU	IU	IU	1U
Benzene	5	1U	IU	IU	IU	IU	IU	1U	1U	IU
Chlorobenzene	100	IU	1U	IU	1U	IU	1U	IU	IU	1U
Dichloromethane	5	2U								
Chloroform	70	IU	1U	1U	1U	IU	1U	1U	1U	IU
Toluene	1000	IU	1U	IU	1U	IU	IU	1U	IU	1U

Table 5: Goundwater Monitoring Data From Stanley Kessler Well MW-4 (µg/L)

MW-4	Performance Standard	9/16/2014	3/26/2015	9/28/2015	3/30/2016	9/28/2016	3/27/2017	9/18/2017	3/14/2018	9/25/2018
TCE	5	2.6	IU	2.2	1.4	2	1.4	1.5	1U	1.1
1,1,1-TCA	200	IU	1U	1U	1 U	1U	IU	1U	1U	1U
1,1-DCE	7	IU	1U	1U	1U	1U	1U	IU	1U	1U
cis-1,2-DCE	70	IU	1U	-1U	1U	IU	1U	1U	1U	1U
1,1-DCA	810	1U	1U	1U	IU	1U	1U	1U	1U	1U
1,2-DCA	5	IU	1U	1U	IU	1U	1U	IU	1U	1U
PCE	5	IU	1U	1U	IU	IU	1U	IU	1U	IU
1,1,2-TCA	5	IU	1U	1U	IU	IU.	1U	1U	1U	1U
Benzene	5	lU	IU	IU	IU	IU	1U	1U	IU	1U
Chlorobenzene	100	IU	1U	IU	IU	IU	IU	1U	1U	IU
Dichloromethane	5	2U								
Chloroform	70	1U	1U	IU	IU	IU	1U	1U	1U	IU
Toluene	1000	IU	IU	IU	1U	IU	1U	IU	10	1U

Table 6: Goundwater Monitoring Data From Stanley Kessler Well MW-5A (µg/L)

MW-5A	Performance Standard	9/16/2014	3/26/2015	9/28/2015	3/30/2016	9/28/2016	3/27/2017	9/18/2017	3/14/2018	9/25/2018
TCE	5	4.5	4.1	3.5	5.7	6.4	14	14	18	17
1,1,1-TCA	200	3.9	3.7	4	6.1	6.6	14	13	15	14
1,1-DCE	7	IU	IU	1U	1U	IU	1.4	1.5	1.4	1.6
cis-1,2-DCE	70	1.2	T	Ī	1	1.2	1.2	1.3	1.4	1.2
1,1-DCA	810	IU	1U	IU	1.1	1.3	2.5	2.4	2.7	1.7
1,2-DCA	5	1U	1U	ΙU	IU	1U	1U	IU	IU	IU
PCE	5	1U	1U	IU	IU	ΙU	IU	IU	IU	IU
1,1,2-TCA	5	1U	1U	1U	IU	IU	1U	IU	IU	IU
Benzene	5	1U	IU	IU	1U	IU	1U	IU	IU	IU
Chlorobenzene	100	3.3	3.2	3.3	3.3	2.8	1.9	2.1	1.9	1.7
Dichloromethane	5	2U								
· Chloroform	70	1U	IU	1U	1U	IU	1U	1U	IU	IU
Toluene	1000	IU	1U	1U	1U	1U	1U	1U	IU	IU

Table 7: Goundwater Monitoring Data From Stanley Kessler Well MW-6 (μg/L)

MW-6	Performance Standard	9/16/2014	3/26/2015	9/28/2015	3/31/2016	9/29/2016	3/27/2017	9/18/2017	3/15/2018	9/26/2018
TCE	5	IU	1U	IU	1.1	1	100D	4.9	3.9	2.6
1,1,1-TCA	200	IU	IU	1U	IU	1U	73D	3.9	3.2	1.8
1,1-DCE	7	1U	1U	1U	IU	1U	7.8	IU	IU	IU
cis-1,2-DCE	70	IU	IU	1U	IU	IU	1.1	IU	IU	IU
1,1-DCA	810	1U	IU	1U	IU	IU	IU	IU	IU	IU
1,2-DCA	5	1U	1U	IU	1U	IU	IU	1U	IU	1U
PCE	5	1U	IU	IU	IU	IU	3.7	IU	IU	1U
1,1,2-TCA	5	1U	1U	1U	IU	IU	IU	1U	IU	1U
Benzene	5	IU	IU	1U	1U	1U	IU	1U	IU	1U
Chlorobenzene	100	1.7	1.4	1.2	1U	1 U	IU	1U	IU	1U
Dichloromethane	5	2U	2U	2U	2U	2U	2U	2U	2U	2U
Chloroform	70	1U	1U	1U	IU	1U	1U	1U	1U	1U
Toluene	1000	$\mathbf{1U}$	1U	1U	1U	IU	1 <b>U</b>	1U	lU	1U

Table 8: Goundwater Monitoring Data From Stanley Kessler Well MW-7 (µg/L)

MW-7	Performance Standard	9/16/2014	3/26/2015	9/28/2015	3/30/2016	9/28/2016	3/27/2017	9/18/2017	3/14/2018	9/25/2018
TCE	5	15	11	19	37D	82D	38D	25D	30D	23
1,1,1-TCA	200	20	14	27	44D	120D	33D	28D	27D	24
1,1-DCE	7	3.1	1.6	3.1	5.6	16	3.9	3.9	3	3.1
cis-1,2-DCE	70	1.1	1U	1U	IU	1U	1	1.1	1.3	IU
1,1-DCA	810	IU	IU	1U	1.1	1.2	2	2.2	2.8	1U
1,2-DCA	5	IU	1U	IU	IU	IU	IU	IU	IU	1U
PCE	5	IU	1U	1U	2	5.7	2	1.4	1.4	IU
1,1,2-TCA	5	IU	1U	IU						
Benzene	5	IU	1U	IU	IU	IU	IU	IU	IU	1U
Chlorobenzene	100	2.2	2	2	2.4	1.6	1.7	1.7	1.7	1U
Dichloromethane	5	2U								
Chloroform	70	1U	1U	IU	IU	1U	1U	IU	1U	1U
Toluene	1000	1U	IU	1U	1U	1U	IU	IU	IU	1U

Table 9: Goundwater Monitoring Data From Stanley Kessler Well RW-8 (µg/L)

RW-8	Performance Standard	9/16/2014	3/26/2015	9/28/2015	3/30/2016	9/28/2016	3/27/2017	9/18/2017	3/14/2018	9/25/2018
TCE	5	43	26	29	21	23	21	21	23	26
1,1,1-TCA	200	25	18	16	13	14	12	15	15	16
1,1-DCE	7	5U	2.8	2.9	2U	2.3	2.1	2.1	2	2
cis-1,2-DCE	70	5U	1.1	2U	2U	2U	1U	1.1	1.1	2U
1,1-DCA	810	5U	IU	2U	2U	2U	1U	IU	IU	2U
1,2-DCA	5	5U	1U	2U	2U	2U	1U	IU	IU	2U
PCE	5	5U	IU	2U	2U	2U	1U	IU	IU	2U
1,1,2-TCA	5	5U	IU	2U	2U -	2U	IU	IU	1U	2U
Benzene	5	5U	IU	2U	2U	2U	1U	IU	IU	2U
Chlorobenzene	100	5U	2.9	2.7	2.3	2.2	1.7	1.8	1.5	2U
Dichloromethane	5	10U	2U	4U	4U	4U	2U	2U	2U	4U
Chloroform	70	5U	IU	2U	2U	2U	IU	1U	IU	2U
Toluene	1000	5U	1U	2U	2U	2U	1U	1U	IU	2U

Table 10: 1,4-Dioxane Sampling Results (µg/L)

	3/26/2010	3/16/2011	3/26/2015	3/30/2016
Effluent	8	6.6	NS	NS
RW-8	7.8	5.3	12	11
RW-1	5.7	5.9	12	8.3
MW-7	NS	NS	11	8.6

Qualifiers:

U=Non-detect Result

NS=Not Samped

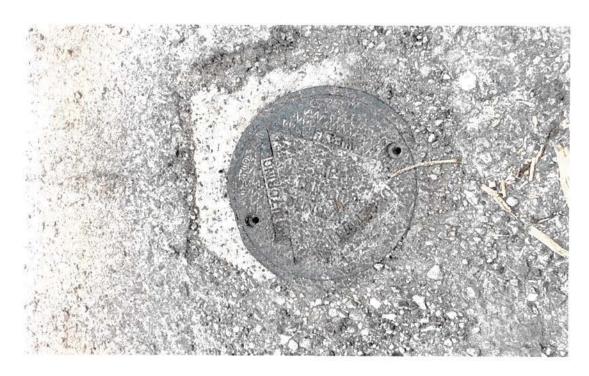
J=Estimated Result

D=Analysis was performed at a secondary dilution factor

# APPENDIX D – SITE PHOTOS



**GETS** discharge point



Monitoring Well -7 Cover



**GETS Building** 



Recovery Well

#### APPENDIX E - PUBLIC NOTICE

# **EPA REVIEWS CLEANUP**

# Stanley Kessler Superfund Site

The U.S. Environmental Protection Agency (EPA) is reviewing the cleanup that was conducted at the Stanley Kessler Superfund Site located in King of Prussia, PA. EPA inspects sites regularly to ensure that cleanups conducted remain protective of public health and the environment. EPA's previous review of the site in 2014 determined that the remedy was working as designed; additionally, monitoring of potential vapor intrusion was recommended to ensure protectiveness in the long term. Findings from the current review being conducted, which will provide an update on the vapor intrusion monitoring, will be available September 2019.

For questions or to provide site-related information for the review:

Contact:

Gina Soscia, EPA Community Involvement Coordinator

Phone:

215-814-5538

Email:

soscia.gina@epa.gov

To access detailed site information including the Review Report once finalized: https://www.epa.gov/superfund/stanleykessler

**Protecting human health and the environment**